



## PATENT ABSTRACTS OF JAPAN

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(54) **TOUCH PANEL**

## (57) Abstract:

**PURPOSE:** To decrease the man-hours of dot space formation and reduce the cost by forming a transparent substrate of resin and forming dot spacers integrally on the top surface of the transparent substrate.

**CONSTITUTION:** A transparent film 11 is formed of a resin film such as PET and has such flexibility that it can easily deform when pressed with a finger tip or pen. A 1st transparent resistance film 12 is formed of a transparent conductive film of ITO,  $\text{SnO}_2$ , etc., and formed over the entire reverse surface of the transparent film 11 to uniform thickness, and deforms together with the transparent film 11 when pressed. The transparent substrate 13 is made of resin such as PC, PMMA, PET, PAR, and PES and a 2nd transparent re-

sistance film 14 is formed of a material similar to that of the 1st transparent film 12 and added over the entire top surface (except dot spacers 15) of the transparent substrate 13 to uniform thickness. The dot spacers 15 are used to secure the insulation state between the transparent resistance films, and formed integrally on the top surface of the transparent substrate 13 in specific array.

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